

# What are the Sources of Physician Resistance to Adoption of the Computerized Patient Record?

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Resistance to the computerized patient record (CPR) by physicians is often cited as a barrier to its adoption as a national standard of care. We were interested in the prevalence of physician resistance to the CPR. We also questioned whether physicians' demographics, computer literacy, fear of patient rejection, or beliefs about the CPR's relationship to federal health care reform were associated with that resistance.

We mailed a two-page questionnaire to 248 physicians comprising the active membership of the Milwaukee County Medical Society. Sixty-one urban and suburban and urban physicians (24.6%) responded. We asked them whether they strongly agreed (rating=5), agreed (=4), were neutral (=3), disagreed (=2), or strongly disagreed (=1) with twenty statements about information management and the CPR, including whether they favored its adoption.

Physicians' mean age was 49.4 +/- 9.5 years. They had been in practice for a mean of 18.4 +/- 9.8 years. Their patients paid primarily by the fee-for-service mechanism (70.4 +/- 28.6% of patients). Overall, 36 of the 61 physicians favored the adoption of the CPR (strongly agreed or agreed), 18 did not favor adoption (were neutral, disagreed, or strongly disagreed), and seven had no opinion.

In bivariate analyses, among the 54 physicians with an opinion, those in multispecialty or academic practices were more likely to favor adoption of the CPR

as compared to those in solo practices or small single specialty practices (90% vs. 52%,  $p=0.003$ , chi-square;  $R(\text{Spearman})=0.4$ ). There was a trend for specialists to favor adoption more than primary care physicians (73% vs. 50%,  $p=0.124$ ,  $R=0.21$ ). Physicians who found computers difficult to use were less likely to favor adoption (36% vs. 74%,  $p=0.017$ ,  $R=-0.3$ ). As expected, those who believed the CPR would improve the quality of medical care were more likely to favor adoption (85% vs. 27%,  $p<0.001$ ,  $R=0.6$ ). Those who didn't feel patients would accept the CPR were less likely to favor adoption (45% vs. 83%,  $p=0.018$ ,  $R=0.37$ ). Ninety-five percent of physicians favoring and 50% of those not favoring adoption thought it should occur as part of overall national health care reform ( $p=0.001$ ,  $R=0.47$ ). Physician age or percent of patients paying by fee-for-service did not influence opinion.

In multivariate analysis (logistic regression), favoring adoption as part of overall reform, believing that patients will accept the CPR, and being in a multispecialty or academic practice most strongly predicted favoring the adoption of the CPR.

We conclude that the majority of physicians favor adoption of the CPR, but that certain practice characteristics and opinions influence this favor. Knowing these influences may assist in removing obstacles to adoption of the CPR.